

**MASTER
NEGATIVE
NO. 95-82323-6**

COPYRIGHT STATEMENT

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials including foreign works under certain conditions. In addition, the United States extends protection to foreign works by means of various international conventions, bilateral agreements, and proclamations.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

The Columbia University Libraries reserve the right to refuse to accept a copying order if, in its judgement, fulfillment of the order would involve violation of the copyright law.

Author:

**U.S. Federal Power
Commission**

Title:

**Installed water power in
the United States and...**

Place:

Washington, D.C.

Date:

1941

95-82323-6
MASTER NEGATIVE #

COLUMBIA UNIVERSITY LIBRARIES
PRESERVATION DIVISION

BIBLIOGRAPHIC MICROFORM TARGET

ORIGINAL MATERIAL AS FILMED - EXISTING BIBLIOGRAPHIC RECORD

BUSINESS
D550.9
Un343

U. S. *Federal Power Commission.*
Installed water power in the United States and outlying
territories. Washington, 1941.
9 p. map. 27 cm. (*Its Statistical series, 14*)

1. Electric power—Stat.—U. S. i. Title. (Series)
HD9685.U4A65 1941f 621.312134 50-16390

Library of Congress 131

RESTRICTIONS ON USE:

TECHNICAL MICROFORM DATA

FILM SIZE: 35mm

REDUCTION RATIO: 16x

IMAGE PLACEMENT: IA (IIA) IB IIB

DATE FILMED: 1-18-95

INITIALS: W.W

TRACKING # : MSH 03711

FILMED BY PRESERVATION RESOURCES, BETHLEHEM, PA.

U.S. Federal power commission,

Installed water power in the United States
and outlying territories Jan 1 1941

D550.9 - Un343

Columbia University
in the City of New York

THE LIBRARIES



Graduate
SCHOOL OF BUSINESS
Library

pus

INSTALLED WATER POWER
IN THE
UNITED STATES AND OUTLYING TERRITORIES
JANUARY 1, 1941



COLUMBIA
UNIVERSITY

FEDERAL POWER COMMISSION
WASHINGTON

Business
D550.9
Un 343

FEDERAL POWER COMMISSION

LELAND OLDS, *Chairman*
CLAUDE L. DRAPER, *Vice Chairman*
BASIL MANLY
JOHN W. SCOTT
CLYDE L. SEAVEY
LEON M. FUQUAY, *Secretary*



When ordering, this publication may be referred to as
F P C S - 14
For Sale Only By The Federal Power Commission, Washington, D. C.
Price 10 Cents

INSTALLED WATER POWER
IN THE UNITED STATES AND OUTLYING TERRITORIES

JANUARY 1, 1941

APR 7 1953 BB

FEDERAL POWER COMMISSION
WASHINGTON
JUNE 1941

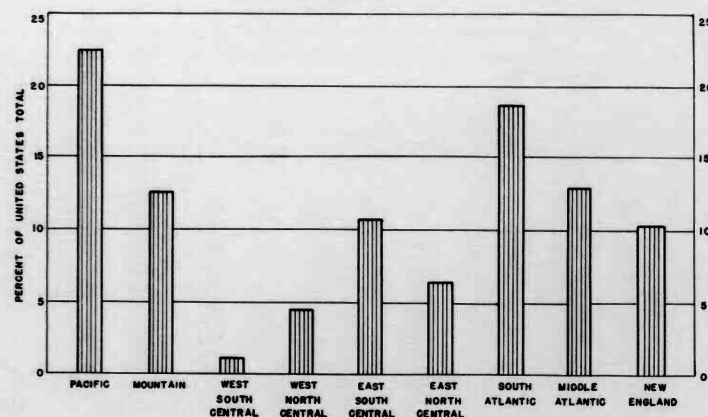
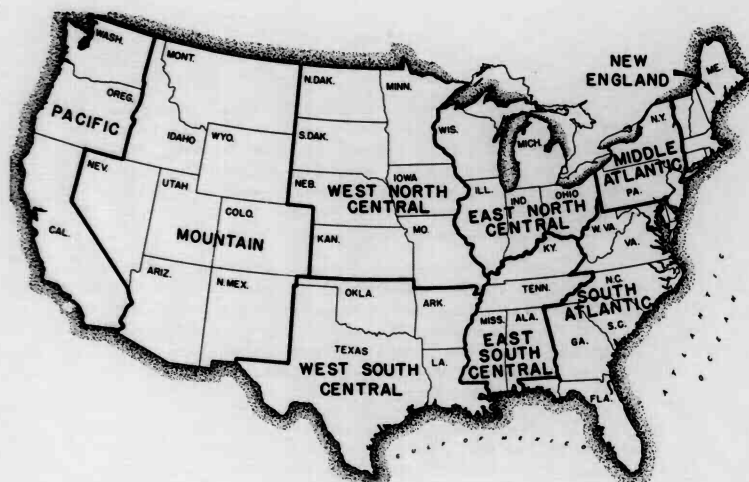
FOREWORD

This report presents summaries, as of January 1, 1941, showing the capacity in horsepower for all water-power plants of 100 horsepower or more for each state and for the United States. The data include the water-wheel capacity of all plants whether owned by utility or industrial companies and whether or not electric generating equipment is installed.

The present report is a continuation of a series published by the Federal Power Commission since 1938 and in previous years by the Division of Power Resources of the United States Geological Survey. Each table presented in this publication is arranged so as to be readily comparable with data published in similar reports for previous years.

The data shown in the tables of this publication were compiled largely from reports submitted to the Commission by public utilities, industrial concerns, and individuals utilizing water power for miscellaneous purposes. Other sources of information include reports published by state commissions and special tabulations supplied by cooperating agencies of the Federal Government.

**DISTRIBUTION OF INSTALLED WATER POWER
IN THE UNITED STATES
BY GEOGRAPHIC DIVISIONS
January 1, 1941**



**INSTALLED WATER POWER
IN THE UNITED STATES AND OUTLYING TERRITORIES**

JANUARY 1, 1941

The total installed capacity of water power in plants of 100 horsepower or more in the United States and outlying territories on January 1, 1941, was 19,015,101 horsepower. The total capacity for the United States on this date was 18,868,027 horsepower, which figure represents a net increase of 367,773 horsepower over that reported as of January 1, 1940. The five states showing the largest net increase in installed water power capacity during 1940 were: Tennessee, 106,125; North Carolina, 78,945; Oregon, 72,875; Pennsylvania, 42,424; and New Mexico, 34,390 horsepower.

The following tabulation shows for the United States the distribution of water-power plants and installed water-power capacity between electric utilities and industrial and miscellaneous companies as of January 1, 1941 and January 1, 1940.

CLASSIFICATION	CAPACITY			
	INSTALLED HORSEPOWER		PERCENT OF TOTAL	
	JAN. 1, 1941	JAN. 1, 1940	JAN. 1, 1941	JAN. 1, 1940
Electric Utilities	16,773,622	16,400,752	88.9	88.7
Industrial and Miscellaneous	2,094,405	2,099,502	11.1	11.3
Total	18,868,027	18,500,254	100.0	100.0

CLASSIFICATION	PLANTS			
	NUMBER		PERCENT OF TOTAL	
	JAN. 1, 1941	JAN. 1, 1940	JAN. 1, 1941	JAN. 1, 1940
Electric Utilities	1,527	1,544	54.5	53.8
Industrial and Miscellaneous	1,274	1,328	45.5	46.2
Total	2,801	2,872	100.0	100.0

As the figures shown include reported additions and deductions made in installed water power during 1940, the difference between the figures shown for January 1, 1941 and those shown for January 1, 1940 reflect only net changes made during the year.

The total number of water-power plants of 100 horsepower and over available for service as of January 1, 1941 was 2,801 which represents a net reduction of 71 plants from those available for service on January 1, 1940. This reduction was largely caused by the removal from the records of a number of small plants which are no longer considered to be capable of producing power.

During 1940 seven major hydroelectric installations were placed in operation. Of these, five were Federal projects, and two were installations made by privately owned electric utilities. The individual capacities of these seven major installations are detailed below:

MAJOR HYDROELECTRIC GENERATING CAPACITIES ADDED IN 1940	
FEDERAL PROJECTS	HORSEPOWER
Bureau of Reclamation:	
Borerville	74,000
Elephant Butte	34,500
Lower Colorado River Authority:	
Austin	20,000
Tennessee Valley Authority:	
Chickamauga	108,000
Hivasssee	80,000
Total	316,500
PRIVATE COMPANIES	
Central Maine Power Company	34,000
Safe Harbor Water Power Company	42,500
Total	76,500

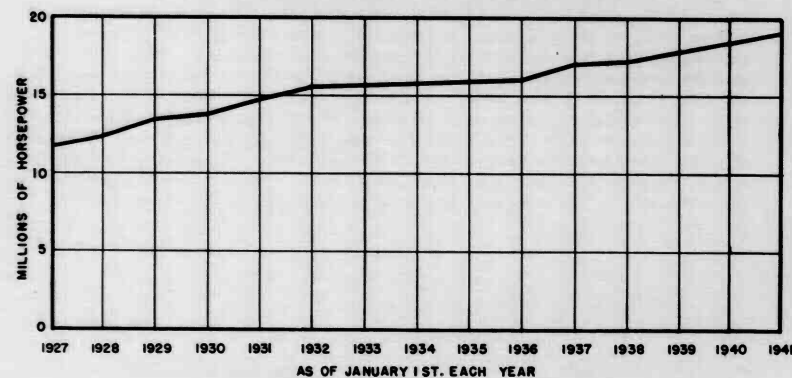
The growth in the installed capacity of water wheels in the United States by years during the period 1927 to 1941 is shown in the chart and tabulation on page 6. Data for the years 1921, 1924, 1925 and 1926 are also shown in the tabulation. The annual increase in the installed capacity of water wheels since January 1, 1926 has varied between 4,100 horsepower in 1935 and 1,275,530 horsepower in 1928. The average increase for the 15-year period, January 1, 1926 to January 1, 1941, is approximately 513,000 horsepower per year.

The ten states which have the largest installed water-power capacity as of January 1, 1941 are shown by the chart and tabulation on page 7. California with a total installed water-power capacity of 2,438,261 horsepower, representing 12.9 percent of the United States total, ranked first among the 48 states. Other states having installed water-power capacity in excess of one million horsepower are New York, Washington, Alabama, and North Carolina.

The distribution of installed water-power capacities in the United States by geographic divisions is shown by the map and chart on page 2. Detailed data on capacities and on number of plants for each state, geographic division, and the United States are shown in Table 1.

The distribution of installed capacity and number of plants by size, states, geographic divisions, and for the United States is shown in Table 2. Of the total water-power capacity in plants of 100 horsepower or over in the United States, 88.8 percent or 16,747,053 horsepower, is installed in plants having 5,000 horsepower capacity and over; 8.3 percent or 1,574,552 horsepower is installed in plants from 1,000 to 5,000 horsepower capacity; and the remainder 2.9 percent or 546,422 horsepower is installed in plants of from 100 to 1,000 horsepower capacity. In terms of the number of plants, however, the situation is reversed. Of the total number of plants of 100 horsepower or more in the United States 57.6 percent or 1,613 plants were in the group of plants with capacities between 100 and 1,000 horsepower; 24.6 percent or 688 plants were in the group with capacities from 1,000 to 5,000 horsepower; and 17.8 percent or 500 plants were in the group with capacities of 5,000 horsepower and over.

GROWTH OF INSTALLED CAPACITY OF WATER WHEELS
IN THE UNITED STATES
DURING THE PERIOD 1927 TO 1941, INCLUSIVE.



TOTAL INSTALLED WATER-WHEEL CAPACITY IN THE UNITED STATES
FROM 1921 TO 1941, INCLUSIVE, AND RELATIVE INCREASES

DATE	INSTALLED HORSEPOWER	INCREASE	
		HORSEPOWER	PERCENT
1921 (November)	7,926,958	-	-
1924 (March)	9,086,958	1,160,000 ^a	14.6 ^a
1925 (March)	10,037,655	950,697 ^b	10.5 ^b
1926 (January 1)	11,176,596	1,138,941	11.3
1927 do	11,720,983	544,387	4.9
1928 do	12,296,000	575,017	4.9
1929 do	13,571,530	1,275,530	10.4
1930 do	13,807,778	236,248	1.7
1931 do	14,884,667	1,076,889	7.8
1932 do	15,562,805	678,138	4.6
1933 do	15,817,941	255,136	1.6
1934 do	15,913,451	95,510	0.6
1935 do	16,075,307	161,856	1.0
1936 do	16,079,407	4,100	0.0
1937 ^c do	17,119,610	1,040,203	6.5
1938 do	17,264,697 ^d	145,087	0.8
1939 do	17,948,906	684,209	4.0
1940 do	18,500,254	551,348	3.1
1941 do	18,868,027	367,773	2.0

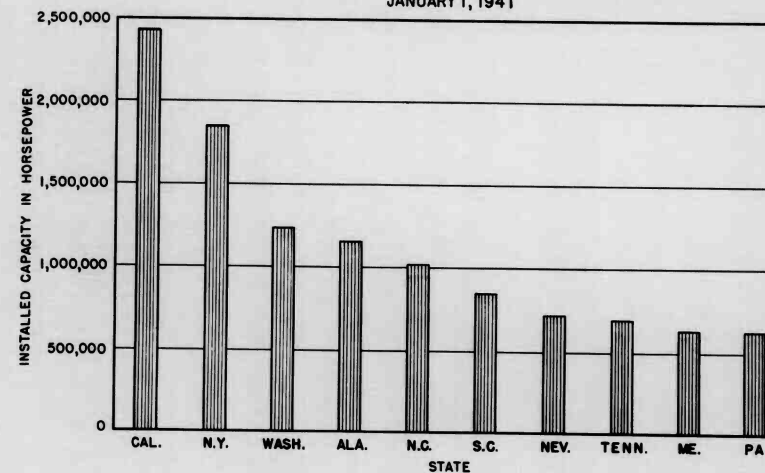
^a About 2.3 years.

^b About 0.8 years.

^c Data for the years prior to 1938 were compiled by the Division of Power Resources of the Geological Survey.

^d Revised after publication of 1938 report.

INSTALLED WATER POWER CAPACITY FOR THE TEN LEADING STATES
JANUARY 1, 1941



TEN LEADING STATES IN INSTALLED WATER-POWER CAPACITY

JANUARY 1, 1941

RANK	STATE	INSTALLED WATER-POWER CAPACITY - HORSEPOWER			PERCENT OF U.S. TOTAL
		PUBLICLY AND PRIVATELY OWNED ELECTRIC UTILITIES	INDUSTRIAL AND MISCELLANEOUS COMPANIES	TOTAL	
1	California	2,418,789	19,472	2,438,261	12.9
2	New York	1,640,826	202,961	1,843,787	9.8
3	Washington	1,143,624	70,880	1,214,504	6.4
4	Alabama	1,133,065	12,235	1,145,300	6.1
5	North Carolina	655,444	377,876	1,033,320	5.5
6	South Carolina	791,845	46,704	838,549	4.4
7	Nevada	708,830	0	708,830	3.8
8	Tennessee	525,255	169,151	694,406	3.7
9	Maine	344,097	293,430	637,527	3.4
10	Pennsylvania	598,757	8,546	607,303	3.2
TOTAL		9,960,532	1,201,255	11,161,787	59.2

This book is due on the date indicated below, or at the expiration of a definite period after the date of borrowing, as provided by the library rules or by special arrangement with the Librarian in charge.

[illegible]

C20 (3-52) 100M

Manufactured by
GAYLORD BROS. Inc.
Syracuse, N. Y.
Stockton, Calif.

Un343

U.S. Federal power comm.
Installed water power in the
United States and outlying
territories. Jan 1941.

MSH 03711

NEH

NOV 03 1994

COLUMBIA UNIVERSITY LIBRARIES



0044268890

MAY 12 1953

**END OF
TITLE**